~~~~~~

FUEL CELL CONNECTION -- July 2001 Issue

~~~~~~

IN THIS ISSUE

* Advances Supported by DOE Hydrogen Program Announced by Proton Energy
* Presidio Trust Seeks Megawatt-Size SOFC Cogeneration Plants
* Naval Warfare Center BAA Seeks Proposals on Fuel Cells for Underwater Vehicles
* Hawaii Establishes Partnership for Hydrogen R&D
* New Fuel Cell Private Capital Joint Venture Established

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

CONTENTS

~~~~~~

News on U.S. Government Fuel Cell Programs

~~~~~~

---

1. Advances Supported by DOE Hydrogen Program Announced by Proton Energy

Doug Faulkner has been named Principal Deputy Assistant Secretary for the Office of Energy Efficiency and Renewable Energy at the U.S. Department of Energy. He will report to Assistant Secretary of Energy Dave Garman.

http://ens.lycos.com/ens/jul2001/2001L-07-10-09.html

~~~~~~~~~~~~~~~~~~~

RFP/Solicitation News

~~~~~~~~~~~~~~~~~~~

---

2. Presidio Trust Seeks Megawatt-Size SOFC Cogeneration Plants

The Presidio Trust is soliciting bids for up to four 1-MW solid oxide fuel cell cogeneration plants. Each plant may be comprised of multiple units, and should utilize natural gas in a combined heat and power system. The official solicitation will be posted on or around August 13, 2001, with sealed bids due approximately September 3, 2001.

http://www.presidiotrust.gov/trust/contracts.asp

---

3. AQMD to Fund Pilot Demonstrations of Residential Fuel Cells

The South Coast Air Quality Management District (AQMD) is requesting proposals for the design, development, and installation of residential fuel cells within the District. There are two categories of proposals sought: Stand-Alone Natural Gas Fuel Cells and Reformer-Based Energy Station with Hydrogen Fuel Cells. Total funding available for this RFP is $1 million. The deadline for proposals is September 7, 2001. A bidders conference will be held on August 9, 2001.

http://www.aqmd.gov/hb/attachments/010796.doc

---

4. Stockholm Seeks Residential Fuel Cells

The City of Stockholm is inviting fuel cell manufacturers to participate in a technology procurement for residential fuel cells in the 2-6 kW range. The pilot installations concern fuel cells for the new residential construction in a new city district in central Stockholm. The fuel cells will be fueled with biogas from a nearby sewage treatment plant. Proposals are due September 28, 2001.

http://www.stockholm.se/lip/english/index.asp?a=18&b=2

---

5. Naval Warfare Center BAA Seeks Proposals on Fuel Cells for Underwater Vehicles

The Naval Undersea Warfare Center has issued a Broad Agency Announcement (BAA) for New and Innovative R&D Technological Solutions. One of the topics in the solicitation is for “Thermal and Electric Propulsion”, which includes projects on fuel cells for high-speed underwater vehicles, novel liquid phase fuels for use as a source of hydrogen for fuel cells, and micro electro magnetic system (MEMS) devices for energy conversion. The solicitation is open until June 30, 2002.

http://www.npt.nuwc.navy.mil/contract/announce/baa/2001-01/

---

6. Fuel Cells for Unmanned Air Vehicles Topic in Naval Research Lab BAA

The Naval Research Laboratory is seeking proposals for innovative research in propulsion/energy systems – including fuel cells – for small, unmanned air vehicles. The topic is #188 within NRL’s Broad Agency Announcement for the years 2001 and 2002. Proposals will be accepted through December 31, 2002.

http://heron.nrl.navy.mil/contracts/01baa/118.htm

~~~~~~~~~~~~~~~

State Legislation

~~~~~~~~~~~~~~~

---

7. Hawaii Establishes Partnership for Hydrogen R&D

Hawaii's governor, Benjamin Cayetano, has signed Senate Bill 1435, which establishes a hydrogen private/public partnership within the State of Hawaii's Dept. of Business, Economic Development. $200,000 has been appropriated out of the state's special land and development fund for the first year of the partnership. The Act will sunset on July 1, 2006.
http://www.capitol.hawaii.gov/session2001/bills/sb1435_cd1_.htm

---

8. Fuel Cells an Option for Minnesota Utilities' Renewable Mandate
Minnesota Governor Jesse Ventura signed into law a bill requiring the state's electric utilities to offer customers voluntary options to purchase power generated from renewable sources, including fuel cells and microturbines using renewable fuels. The law sets a non-binding goal for utilities to obtain at least 10% of the energy supplied to retail customers from renewable sources by 2015.
http://www.eren.doe.gov/greenpower/mn_law_0601.shtml

~~~~~~~~~~~~~~~~

Federal Legislation

~~~~~~~~~~~~~~~~

---

9. Energy Research & Technology Act Passed by House Science Committee
The Comprehensive Energy Research and Technology Act of 2001 was passed in the House Science Committee. H.R. 2460: authorizes $600 million in FY2002 for Distributed Energy and Energy Conservation programs; includes the "Alternative Fuel Vehicle Acceleration Act of 2001" to provide grants for alternative fuel and fuel cell vehicles; and includes the "Robert S. Walker and George E. Brown, Jr., Hydrogen Energy Act of 2001" authorizing $40 million in FY2002 funding for hydrogen R&D projects, with annual funding increasing to $60 million in FY2006.
http://thomas.loc.gov/cgi-bin/bdquery/z?d107:h.r.02460:

---

10. Energy Tax Policy Act to Provide Credits for Fuel Cell Power Plants & Vehicles
The House Ways and Means Committee passed HR 2511, the "Energy Tax Policy Act of 2001," which would provide over $33 billion over ten years in tax credits and incentives to "stabilize current energy sources and supply as well as long-term solutions for energy sources and supply." The bill would allow a credit of up to $1,000 per kilowatt for the purchase of qualified fuel cell power plants, and would allow a credit for the purchase of qualified fuel cell motor vehicles.
http://waysandmeans.house.gov/fullcomm/107cong/energy/hr2511sub.pdf

---

11. Blue Dog Democrats Unveil Energy Plan
The Blue Dog Coalition of 32 moderate-to-conservative Democrats in the U.S. House of Representatives has unveiled its energy plan, which recommends continued funding for DOE's fuel cell programs as well as a flexible consumer tax credit of up to $4,000 to encourage the purchase of vehicles equipped with fuel cells or other alternative fuel engines.
http://www.house.gov/john/bluedog/bdenergyplan.pdf

~~~~~~~~~~~~~~~~

Industry Headlines

~~~~~~~~~~~~~~~~

---

12. New Fuel Cell Private Capital Joint Venture Established
Ballard Power Systems, Shell Hydrogen and Westcoast Energy have created Chrysalix Energy Limited Partnership, a new private capital joint venture focused on promoting early stage

companies with high growth potential in fuel cells and related systems, hydrogen infrastructure, maintenance and support techniques.
http://www.ballard.com/viewpressrelease.asp?sPrID=225

---

13. FuelCell Energy Delivers Direct FuelCell to LADWP
FuelCell Energy has shipped a 250 kW Direct FuelCell (DFC) power plant to the Los Angeles Department of Water and Power for installation at LADWP's downtown headquarters. FuelCell Energy currently has a field trial backlog of approximately 10 MW, including two additional 250 kW DFC power plants for LADWP.
http://www.fce.com/site/investor/press/releases/2001/07_26_01.html

---

14. Manhattan Scientifics Unveils 3 kW Portable Fuel Cell
Manhattan Scientifics announced that its German-based NovArs unit has successfully developed and tested a 3 kW fuel cell system, operating on hydrogen, that will be ideal for electric scooters, golf carts, emergency home generators, RVs and other recreational uses. The total system weighs about 13 pounds, and can be scaled down from 3 kW to 1kW.
http://www.manhattsci.com/media_center/pressrelease36.htm

---

15. QUANTUM Ships Hydrogen Storage System for Fuel Cell Bus
QUANTUM Technologies has shipped its advanced hydrogen storage system for the first ThunderPower fuel cell bus, which is being built via a partnership between Thor Industries and ISE Research Corporation. The bus will go into commercial service at SunLine Transit in California later this year.
http://168.143.68.94/press_releases/pr_jul_02_2001_c.shtml

---

16. New Report Predicts 2.4 Million Fuel Cell Vehicles in 2011
A new report by Allied Business Intelligence, "US and Global Automotive Fuel Cell Markets," predicts there will be 2.4 million vehicles running on fuel cells in 2011. ABI expects global automotive fuel cell market penetration will begin with thousands of units in the US and in Japan in 2003 and 2004, with a large ramp-up occurring globally in 2007 and 2008.
http://www.alliedworld.com/energy/product/AFC01.html

~~~~~~~~~~~~
Administration
~~~~~~~~~~~~

Press releases and story ideas may be forwarded to Bernadette Geyer, editor, for consideration at bernie@usfcc.com.

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
About *Fuel Cell Connection*
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

The Sponsors

U.S. Fuel Cell Council -- The U.S. Fuel Cell Council is the business association for anyone seeking to foster the commercialization of fuel cells in the United States. Our membership includes producers of all types of fuel cells, as well as major suppliers and customers. The Council is member driven, with five active Working Groups focusing on: Codes & Standards; Transportation; Power Generation; Portable Power; and Education & Outreach. The Council

provides its members with an opportunity to develop policies and directions for the fuel cell industry, and also gives every member the chance to benefit from one-on-one interaction with colleagues and opinion leaders important to the industry. Members also have access to exclusive data, studies, reports and analyses prepared by the Council, and access to the "Members Only" section of its web site.
(http://www.usfcc.com/)

National Fuel Cell Research Center -- The mission of the NFCRC is to promote and support the genesis of a fuel cell industry by providing technological leadership within a vigorous program of research, development and demonstration. By serving as a locus for academic talent of the highest caliber and a non-profit site for the objective evaluation and improvement of industrial products, NFCRC's goal is to become a focal point for advancing fuel cell technology. By supporting industrial research and development, creating partnerships with State and Federal agencies, including the U.S. Department of Energy (DOE) and California Energy Commission (CEC), and overcoming key technical obstacles to fuel cell utilization, the NFCRC can become an invaluable technological incubator for the fuel cell industry.
(http://www.nfcrc.uci.edu/)

National Energy Technology Laboratory -- The National Energy Technology Laboratory is federally owned and operated. Its mission is *"We Solve National Energy and Environmental Problems."* NETL performs, procures, and partners in technical research, development, and demonstration to advance technology into the commercial marketplace, thereby benefiting the environment, contributing to U.S. employment, and advancing the position of U.S. industries in the global market.
(http://www.netl.doe.gov)